



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,475	11/30/2000	Perry L. Schwalb	15637/77842-00	1651

7590 04/19/2005

Keith M. Landry  
Jones Walker  
201 St. Charles Avenue, 50th Floor  
New Orleans, LA 70170-5100

EXAMINER

FRENEL, VANEL

ART UNIT	PAPER NUMBER
----------	--------------

3626

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/726,475

Applicant(s)

SCHWALB ET AL.

Examiner

Vanel Frenel

Art Unit

3626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 04/01/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### Notice to Applicant

1. This communication is in response to the Amendment filed on 04/01/05. Claims 1, 15-17 and 30 have been amended. Claims 1-31 are pending.
2. Applicant's arguments filed on 04/01/05 have been persuasive, therefore the previous Office Action has been vacated and new Office Action is presented.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitzgerald et al (6,260,049) in view of Pinsky et al (5,513,101).  
(A) As per claim 1, Fitzgerald discloses comprising the steps of: providing a system that includes a computer and a plurality of monitors interfaced with the computer (Col.11, lines 11-19), each monitor for displaying an image (Col.12, lines 5-10); using at least one of the monitors to simulate a radiology "light box" for displaying electronic radiology images (Col.6, lines 50-67); c) using at least one of the monitors to simulate a digital graphical representation of a patient's manual master folder, the digital folder representation specifically designed for use by a radiologist by providing information

and links to radiology reports and images in an electronic layout and color scheme conforming to the layout and color scheme of the patient's manual master folder and tailored to a radiology practice (See Abstract; Col.24, lines 15-67; Col.25, lines 10-32);

d) using a hyperlink to open the folder displayed in step "c" to display information contained in the folder (See Col.25, lines 1-6); and e) using a hyperlink that accesses the folder to display a radiology image (See Col.7, lines 5-22).

Fitzgerald does not explicitly disclose an electronic method of improving the efficiency of a radiologist.

However, this feature is known in the art, as evidenced by Pinsky. In particular, Pinsky suggests an electronic method of improving the efficiency of a radiologist (See Pinsky, Col.1, lines 32-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the features of Pinsky within the system of Fitzgerald with the motivation of providing a system for improving the distribution of radiology services which would result in an integrated regional and national for standardized, thereby achieving efficiency and utilization of radiologists (See Pinsky, Col.1, lines 31-40).

(B) As per claim 2, Fitzgerald discloses the method wherein in step "d" a voice activated command is used to open the patient's master folder (Col.14, lines 11-49).

(C) As per claim 3, Fitzgerald discloses the method wherein in step "d" a trackball device is used to open the patient's master folder (Col.14, lines 11-49).

(D) As per claim 4, Fitzgerald discloses the method further comprising the step of providing a combination dictation and trackball device, and wherein in step d a user can selectively use either a voice activated command or a trackball to open the patient's master folder (Col.14, lines 10-49).

(E) As per claim 5, Fitzgerald discloses the method further comprising the step of using the computer to interface the monitors and the hyperlink (Col.11, lines 44-67).

(F) As per claim 6, Pinsky discloses the method further comprising the step of using the computer to interface the monitors and the combination dictation and trackball device (Col.5, lines 41-67).

(G) As per claim 7, Pinsky discloses the method wherein there are two monitors in step "c" that are used to display electronic radiology images (Col.6, lines 19-47).

(H) As per claim 8, Pinsky discloses the method wherein the monitor in step "c" that is used to display electronic radiology images is a high-resolution monitor (Col.10, lines 21-57).

(I) As per claim 9, Pinsky discloses the method wherein the monitors in step "c" that are used to display electronic radiology images is a high-resolution monitor (Col.10, lines 21-57).

(J) As per claim 10, Pinsky discloses the method wherein in step "b" the image viewed is an ultrasound image (Col.1, lines 44-51).

(K) As per claim 11, Pinsky discloses the method wherein in step "b" the image viewed is a magnetic resonance image (Col.1, lines 44-51).

(L) As per claim 12, Pinsky discloses the method wherein in step "b" the image viewed is a computer tomography image (Col.1, lines 44-51).

(M) As per claim 13, Pinsky discloses the method wherein in step "b" the image viewed is a computer radiology image (Col.1, lines 44-51).

(N) As per claim 14, Pinsky discloses the method of claim 1 wherein in step "b" the image viewed is a nuclear medicine image (Col.1, lines 44-51).

(O) As per claim 15, Fitzgerald discloses b) displaying an image of a radiology master folder on an area of a computer display (Col.11, lines 60-67); generating data fields associated with a digital master folder on the image of a master folder including

patient's name, medical record number, date of birth, sex, and information regarding all procedures including date, type of procedure, report, and radiologist, the digital master folder specifically designed for use by a radiologist (See Abstract; Col.24, lines 15-67; Col.25, lines 10-32); d) displaying information associated with the patient from computer memory in a data field on the computer display in an electronic layout and color scheme confirming to the layout and color scheme of the patient's manual master folder (See Abstract; Col.24, lines 15-67; Col.25, lines 10-32); e) associating links with the procedure and report data fields to provide for the viewing of additional information or images when clicked, the information and images displayed in electronic formats and configurations tailored to a radiology practice (Col.23, lines 1-42); clicking on the report field, displays a new window that contains the text of the report and a link to the digitally recorded dictation of the report, that when clicked will play the recording (Col.23, lines 1-56); g) placing a cursor over the report field on the digital master folder, to display summary information of the report (Col.24, lines 1-30); h) clicking on the procedure field to send a command to a viewing portal to load all of the procedures and images that meet the criteria of the radiologist's file (Col.6, lines 40-67; Col.23, lines 1-27); i) generating a searchable and selectable list of patients that have procedures assigned to the radiologist on the computer display (Col.23, lines 1-41); and j) providing commands that navigate through the stack of master folders, displaying information associated with a new patient in a data field on the computer display from computer memory (Col.22, lines 44-67 to Col.24, line 27).

Fitzgerald does not explicitly disclose a method for reviewing electronic radiology information including patient demographics, radiology procedures, radiology reports and radiology images, comprising the steps of: a) loading the radiology information associated with a selected group of patients that are assigned to a selected radiologist into a computer memory.

However, these features are known in the art, as evidenced by Pinsky. In particular, Pinsky suggests a method for reviewing electronic radiology information including patient demographics, radiology procedures, radiology reports and radiology images, comprising the steps of: a) loading the radiology information associated with a selected group of patients that are assigned to a selected radiologist into a computer memory (See Pinsky, Col.3, lines 45-67 to Col.4, line 7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the features of Pinsky within the system of Fitzgerald with the motivation of providing a system for improving the distribution of radiology services which would result in an integrated regional and national for standardized, thereby achieving efficiency and utilization of radiologists (See Pinsky, Col.1, lines 31-40).

(P) As per claim 16, Fitzgerald discloses c) means for searching for a plurality of user specified types of information contained in the information database (Col.12, lines 24-56); d) means for displaying the specified types of information over a monitor of a computer connected to the computer network using a digital master folder representation of a patient's manual master folder, the digital master folder



representation specifically designed for use by a radiologist by providing information and links to radiology reports and images in an electronic layout and color scheme conforming to the layout and color scheme of the patient's manual master folder and tailored to a radiology practice (See Abstract; Col.24, lines 15-67; Col.25, lines 10-32).

Fitzgerald does not explicitly disclose means for transmitting and receiving the information between computers connected to a computer network via extensible markup language (XML), HTTP, TCP/IP; an apparatus to access, store, and distribute electronic radiology information including patient demographics, radiology procedures, radiology reports and radiology images comprising: a) an information data base including patient demographics, radiology identification number, procedures, images, reports, orders and appointments.

However, these features are known in the art, as evidenced by Pinsky. In particular, Pinsky suggests means for transmitting and receiving the information between computers connected to a computer network via extensible markup language (XML), HTTP, TCP/IP (See Pinsky, Col.8, lines 31-67 to Col.9, line 20); an apparatus to access, store, and distribute electronic radiology information including patient demographics, radiology procedures, radiology reports and radiology images comprising: a) an information data base including patient demographics, radiology identification number, procedures, images, reports, orders and appointments (See Pinsky, Col.3, lines 45-67 to Col.4, line 7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the features of Pinsky within the system of Fitzgerald with the

motivation of providing a system for improving the distribution of radiology services which would result in an integrated regional and national for standardized, thereby achieving efficiency and utilization of radiologists (See Pinsky, Col.1, lines 31-40).

(Q) As per claim 17, Fitzgerald discloses a multi-monitor radiology image viewing system comprising: a plurality of monitors (Col.11, lines 11-19);

b) a combination dictation and trackball device that provides a hyperlink for the viewing of the patients information and medical images on separate monitors (See Fitzgerald, Col.23, lines 1-56) comprising: a radiology portal that includes a monitor and a computer for the searching and that includes viewing medical information, the medical information displayed over the monitor using a digital master folder representation of a patient's manual folder, the digital master folder representation specifically designed for use by a radiologist by providing information and links to radiology reports and images in an electronic layout and color scheme conforming to the layout and color scheme of the patient's manual master folder and tailored to a radiology practice (See Fitzgerald, See Abstract; Col.24, lines 15-67; Col.25, lines 10-32); said combination dictation and trackball device including a voice component that issues operational and navigational commands to the radiology portal and viewing portal by providing continuous speech recognition for the creation of dictated radiology reports (See Fitzgerald, Col.23, lines 1-61).

Fitzgerald does not explicitly disclose d) said viewing portal consisting of at least two monitors designed for the viewing of a plurality of radiology images including

computer radiology, computer tomography, ultrasound, nuclear medicine, and magnetic resonance images.

However, these features are known in the art, as evidenced by Pinsky. In particular, Pinsky suggests d) said viewing portal consisting of at least two monitors designed for the viewing of a plurality of radiology images including computer radiology, computer tomography, ultrasound, nuclear medicine, and magnetic resonance images (See Pinsky, Col.3, lines 45-67 to Col.4, line 7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the features of Pinsky within the system of Fitzgerald with the motivation of providing a system for improving the distribution of radiology services which would result in an integrated regional and national for standardized, thereby achieving efficiency and utilization of radiologists (See Pinsky, Col.1, lines 31-40).

(R) As per claim 18, Pinsky discloses the system wherein the radiology portal consists of a flat panel monitor and computer for the searching and viewing of medical information stored internal and external to the system (The Examiner interprets Computer i.e., Macintosh, or IBM-PC compatible and other to be a form of a flat panel monitor and computer for the searching and viewing of medical information stored internal and external to the system See Col.10, lines 21-67).

(S) As per claim 19, Pinsky discloses the system wherein the radiology portal consists of a touch screen flat panel monitor and computer for searching and viewing of

medical information stored internal and external to the system (The Examiner interprets Computer i.e., Macintosh, or IBM-PC compatible and other to be a form of a flat panel monitor and computer for the searching and viewing of medical information stored internal and external to the system See Col.10, lines 21-67).

(T) As per claim 20, Fitzgerald discloses the system wherein the radiology portal consists of a flat panel monitor and computer with multi-processors for searching and viewing of medical information stored internal and external to the system (Col.11, lines 12-59).

(U) As per claim 21, Fitzgerald discloses the system wherein the radiology portal consists of a touch screen flat panel monitor and computer with multi processors for searching and viewing of medical information stored internal and external to the system (Col.11, lines 12-59).

(V) As per claim 22, Pinsky discloses the system wherein the viewing portal consists of a single high-resolution monitors design for the viewing of a plurality of radiology images including computer radiology, computer tomography, ultrasound, nuclear medicine, and magnetic resonance images (Col.1, lines 44-67; Col.13, lines 6-21).

(W) As per claim 23, Pinsky discloses the system wherein the viewing portal consists of a single high-resolution computer monitor (Col.10, lines 21-57).

(X) As per claim 24, Pinsky discloses the system wherein the viewing portal consists of two high-resolution computer monitors (Col.10, lines 21-57).

(Y) As per claim 25, Pinsky discloses the system wherein the viewing portal consists of a four high-resolution monitors design for the viewing of a plurality of radiology images including computer radiology, computer-tomography, ultrasound, nuclear medicine, and magnetic resonance images (Col.9, lines 29-61).

(Z) As per claim 26, Pinsky discloses the system wherein the viewing portal includes six high-resolution monitors for the viewing of a plurality of radiology images including computer radiology, computer tomography, ultrasound, nuclear medicine, and magnetic resonance images (Col.9, lines 29-61).

(AA) As per claim 27, Pinsky discloses the system wherein the viewing portal consists of eight high-resolution monitors design for the viewing of a plurality of radiology images including computer radiology, computer tomography, ultrasound, nuclear medicine, and magnetic resonance images (Col.9, lines 29-61).

(BB) As per claim 28, Pinsky discloses the system wherein the combination dictation and trackball device includes a separate mouse and microphone (Col.5, lines 41-67).

(CC) As per claim 29, Fitzgerald discloses a method for loading images from a current radiology procedure and specific order images from prior radiology procedures in a user specified order into a user interface that includes a computer and computer monitors comprising: a) receiving and loading patient information into computer memory (Col.14, lines 5-60); b) comparing the information of step "a" to display requirements contained in a user profile in order to determine the order in which images from the current procedure are displayed and the order in which selected images from selected prior procedures are displayed, and creating a list of images to display (Col.15, lines 14-67); determining which images on the list already exist in the image cache of the system of claim 17 (Col.20, lines 50-67); and d) downloading all images that do not exist in the image cache of the system of claim 17 (Col.23, lines 12-42).

(DD) As per claim 30, Pinsky discloses a method for displaying images from a current radiology procedure and specific images from prior radiology procedures in a user specified order into the system of claim 17 comprising: a) loading the image list created in the method of claim 29 into the viewing portal and digital roto viewer (The Examiner interprets laser camera based film printers to be a form of the viewing portal and digital roto viewer See col.10, lines 54-67); b) resizing the images to fit correctly into the digital roto viewer's frames (Col.7, lines 46-63); displaying a roto viewer containing all of the images in the correct order on the first high-resolution monitor (Col.10, lines 21-45); and d) display the digital roto viewer's first frame in the viewer portal's light-box (Col.9, lines 29-67).

(EE) As per claim 31, Pinsky discloses a method of dictating a radiology procedure's diagnosis into the system of claim 17 comprising: a) issuing a command to dictate a report in the viewer portal (Col.12, lines 55-67); sending a command to the radiology portal which displays the dictated text of the report (Col.13, lines 6-30); loading the patient demographic and procedure information into the appropriate sections of the new window (Col.11, lines 62-67 to Col.12, line 10); d) digitally recording the voice input (Col.12, lines 55-67); converting the voice input into text via continuous speech recognition (Col.5, lines 41-67); f) displaying the text in a section of new window in the radiology viewer (Col.6, lines 39-47); g) issuing a command to digitally sign the report in the viewer portal via the dictaphone /trackball, sending a command to the radiology viewer to generate and sign the report (Col.6, lines 39-67); generating and digitally signing the report in the radiology viewer (Col.6, lines 29-47); and i) inserting the report into the system of claim 17 (Col.6, lines 29-59).

### **Response to Arguments**

5. Applicant's arguments filed on 04/01/05 with respect to claims 1, 15-17 and 30 have been considered but are moot in view of the new ground(s) of rejection.

### **Conclusion**

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not applied art teaches automatic scaling of display

Art Unit: 3626

for image management system (6,549,214) and navigation and display system for digital radiographs (6,243,095).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanel Frenel whose telephone number is 703-305-4952. The examiner can normally be reached on Monday-Thursday from 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 703-305-9588. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

V.F  
V.F

March 28, 2005

  
JOSEPH THOMAS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600